

**City of Greensboro Planning Department
Zoning Staff Report
September 11, 2006 Public Hearing**

The information provided in this staff report has been included for the purpose of reviewing proposed zoning changes. Since the zoning process does not require a site plan, there may be additional requirements placed on the property through the Technical Review Committee process to address subdivision and development regulations.

Item: H
Location: 3130 Hines Chapel Road (South of Hines Chapel Road, east of McKnight Mill Road, east of the terminus of Nichols Avenue, and east of the terminus of Brame Road)

Applicant: Glenn H. and Carey A. Campbell
Owner: Glenn H. and Carey A. Campbell

From: County AG and RS-30
To: City CD-RS-5

Conditions: 1) Uses: Single family detached residences and accessory uses.

SITE INFORMATION	
Maximum Developable Units	889
Gross Density	7 dwelling units per acre
Existing Land Use	Undeveloped
Acreage	127.7
Physical Characteristics	<i>Topography:</i> Generally flat <i>Vegetation:</i> Wooded <i>Other:</i> N/A
Overlay Districts	N/A
Historic District/Resources	N/A
Generalized Future Land Use	Moderate Residential
Other	N/A

SURROUNDING ZONING AND LAND USE		
Location	Land Use	Zoning
<i>North</i>	Single Family Residential, Item I	Co. AG, Co. RS-30
<i>South</i>	City of Greensboro Landfill	CD-HI
<i>East</i>	Undeveloped	Co. AG
<i>West</i>	Single Family Residential, Undeveloped, Glass Masters Inc.	Co. RS-30, Co. AG

ZONING HISTORY		
Case #	Year	Request Summary
N/A		

DIFFERENCES BETWEEN AG & RS-30 (EXISTING) AND CD-RS-5 (PROPOSED) ZONING DISTRICTS
<p>AG: Primarily intended to accommodate uses of an agricultural nature including farm residences and farm tenant housing. It also accommodates scattered nonfarm residences on large tracts of land. It is not intended for major residential subdivisions.</p> <p>RS-30: Primarily intended to accommodate low density single family detached dwellings on large lots in areas (outside of water supply watersheds and the 60DNL airport noise contour) without access to public water and sewer services. The overall gross density will typically be 1.3 units per acre or less.</p> <p>CD-RS-5: Primarily intended to accommodate high density single family detached dwellings in developments where public water and sewer service is required. The overall gross density will typically be 7.0 units per acre or less. See Conditions for use limitations.</p>

TRANSPORTATION	
Street Classification	Hines Chapel Road – Minor Thoroughfare, Nichols Avenue – Local Street, Brame Road Local Street, Cone Boulevard – Major Thoroughfare, McKnight Mill Road – Minor Thoroughfare.
Site Access	Proposed access points via Hines Chapel Road and the street stubs, Nichols Avenue and Brame Road. All access points/street connections must meet the City of Greensboro and NCDOT Standards.
Traffic Counts	Hines Chapel Road ADT = 1,000, McKnight Mill Road ADT = 4,000.
Trip Generation	24 Hour = 4,122, AM Peak Hour = 318, PM Peak Hour = 403.
Sidewalks	Sidewalks are a requirement of the Development Ordinance. 6' sidewalk with a 4' grass strip is required along both sides of thoroughfares. 5' sidewalk with a 3' grass strip is required along one side (at a minimum, collectors may require sidewalk on both sides) of all other street types.
Transit	No.
Traffic Impact Study	Yes required per TIS Ordinance. Please see the Additional Information section of this staff report for the Executive Summary.
Street Connectivity	Yes street connections will be required to Nichols Avenue and Brame Road. Please see the Additional Information section of this staff report for the City's Street Connectivity Review. It should be noted that the site plan provided in the TIS is a conceptual plan only for the purpose of the TIS and other due diligence needs during the rezoning stage of the development process. City staff will require additional street stubs and a public street along the western edge of the multi-family site to connect into the single family. The street network for this entire site will more than likely change for TRC approval.
Other	N/A.

ENVIRONMENTAL REVIEW	
Water Supply Watershed	No, site drains to North Buffalo Creek
Floodplains	Yes, floodway and floodplain are located on site. No development including fill allowed within the floodway unless all of the approvals/certifications are received from FEMA and/or the City. All of the structures in the floodplain and mechanical equipment must be elevated at least one foot above Base Flood Elevation (BFE). Elevation certificate (for finished floor) required for all structures in the floodplain.
Streams	Perennial streams located on site. A 50' buffer is required for the stream. Buffer is to be measured from top of bank, top of steep slope or edge of contiguous wetlands (whichever produces the greatest buffer). The restrictions within the buffer are as follows: first 15' must remain undisturbed and next 35' has a built upon area limit of 50% with no occupied structures allowed.
Other	Possibility of wetlands on site.

LANDSCAPING REQUIREMENTS	
Location	Required Planting Yard Type and Rate
<i>North</i>	N/A
<i>South</i>	N/A
<i>East</i>	N/A
<i>West</i>	N/A

CONNECTIONS 2025 COMPREHENSIVE PLAN POLICIES

Connections 2025 Written Policies:

Growth at the Fringe Goal: Provide a development framework for the fringe that guides sound, sustainable patterns of land use, limits sprawl, protects rural character, evidences sound stewardship of the environment, and provides for efficient provision of public services and facilities as the City expands. Development will increase density and mix land uses at a pedestrian scale with sidewalks, bikeways, and where possible, public transit.

POLICY 4G.1: Promote compact development.

Housing and Neighborhoods Goal: Meet the needs of present and future Greensboro citizens for a choice of decent, affordable housing in stable, livable neighborhoods that offer security, quality of life, and the necessary array of services and facilities.

POLICY 6A.2: Promote mixed-income neighborhoods.

POLICY 6C: Promote the diversification of new housing stock to meet the needs of all citizens for suitable, affordable housing.

POLICY 9A.5: Continue to link City-initiated annexations and approvals of annexation petitions for water/sewer extension policies regarding designated growth areas.

Connections 2025 Map Policies:

The area requested for rezoning lies within the following map classifications:

Moderate Residential (6-12 d.u./acre): This category accommodates housing types ranging from small-lot, single-family detached and attached single-family dwellings such as townhomes to moderate density, low-rise apartment dwellings.

Tier One (Current Growth Area): Where infrastructure systems are in place, can be economically provided and/or will be proactively extended and where continued annexation and consolidation of the City's development pattern shall be encouraged over the next ten years.

CONFORMITY WITH OTHER PLANS

The following aspects of relevant plans may be applicable in this case:

City Plans: N/A

Other Plans: N/A

STAFF COMMENTS

Planning: This property abuts the primary city limits along its south side (along N. Buffalo Creek) and abuts a previous satellite annexation (future Thornton Subdivision) along a portion of its north side.

It is within the Tier One Growth Area on the Growth Strategy Map in the Comprehensive Plan.

The Thornton Subdivision on the north side of Hines Chapel Road will be extending a 12-inch City water line along that street across most of this property's frontage.

Arrangements have been made among the County, the City, and the developer for the construction of a new lift station, a force main, and several gravity outfalls so as to extend sewer service to this property and, at the same time, provide the major sewer infrastructure needed to serve a large area west and northwest of this property back to the primary city limits.

Fire service can be provided to this property with relatively high difficulty. The first due response would be from County Station #5 on Hicone Road in 7.16 minutes, which exceeds the City's 6-minute standard for response. Response time from the nearest City station would be 8.75 minutes, and 9.23 minutes from the second-nearest City station. The Fire Department's concerns are twofold, on account of those response times and on account of the additional development to be expected as a consequence of sewer availability.

The Fire Department wishes to point out that street connectivity to Nichols Avenue and Brame Road would be a tremendous advantage to all City services. GDOT also considers this a high priority. The first-draft sketch plan shown by the developer's engineer to GDOT shows both these connections eventually being made.

The future extension of East Cone Boulevard, a proposed major thoroughfare, would run east-west through the southernmost part of this property.

The Police Department estimates modest impact on its service provision, with a need for 0.8 additional officer at full build out. Other City services can be provided in a manner similar to their provision to the previously-annexed properties just to the north.

GDOT: The proposed Cone Boulevard extension crosses the Southern Boundary of this proposed development. A feasibility study has not been completed nor has funding been identified at this time. This project has been identified as one of the City of Greensboro's future needs. The Development Ordinance will require that this development dedicate right of way and to build any infrastructure needed to access their property as a part of the Plan Review process for the Cone Boulevard extension.

Water Resources: If any wetlands disturbance and/or stream crossing disturbance is proposed all the required approvals must be obtained from the State and Corps of Engineers. An appropriately sized drainage easement is required on all channels carrying public runoff (size dependent on amount of flow carried in the channel).

STAFF RECOMMENDATION

ADDITIONAL INFORMATION

Proposed Residential Development – Traffic Impact Analysis
Prepared for Builders Land, Inc.
July 6, 2006

Executive Summary

Builders Land, Inc. proposes to build a residential development off Hines Chapel Road in Greensboro, NC (see figure 1). The project consists of a mix of single homes and townhomes. This project would have three full access points located off Hines Chapel Road; two accesses for the multi-family homes, and one to the single family homes. Additionally, the project would have access to McKnight Mill Road via Nichols Avenue and Brame/Minorwood Road.

The City of Greensboro has required a traffic analysis to determine the effect of the proposed project. Transportation engineering consultant firm *John Davenport Engineering Inc.* was contracted to provide a traffic impact analysis for this proposed development. The following intersections were included in the study:

- Minorwood Road @ McKnight Mill Road (existing unsignalized)
- Nichols Avenue @ McKnight Mill Road (existing unsignalized)
- Hines Chapel Road @ McKnight Mill Road (existing unsignalized)
- Hines Chapel Road @ Multi-family Access #1 (Proposed Entrance)
- Hines Chapel Road @ Multi-family Access #2 (Proposed Entrance)
- Hines Chapel Road @ Single Family Main Access (Proposed Entrance)

These intersections were analyzed for the following scenarios:

- Existing conditions
- Future no-build
- Future Build

The proposed build-out year for this development is assumed to be 2010.

This development is expected to generate approximately 4,122 new daily trips; 318 trips during the AM peak and 403 trips during the PM peak.

The table on the following page is the level of service table for the projected impact of these developments:

Level of Service Table						
Intersection	AM Peak (7-9 AM)			PM Peak (4-6 PM)		
	2006 Existing	2010 Future No-Build	2010 Future Build	2006 Existing	2010 Future No-Build	2010 Future Build
Minorwood Road @ McKnight Mill Road	B (10.1) WBL	B (11.6) WBL	B (14.3) WBL	B (11.2) WBL	B (14.5) WBL	C (19.0) WBL
Nichols Avenue @ McKnight Mill Road	B (10.2) WBL	B (12.0) WBL	B (13.1) WBL	B (10.7) WBL	B (13.7) WBL	C (15.3) WBL
Hines Chapel Road @ McKnight Mill Road	B (10.2) WBL	B (12.4) WBL	C (16.2) WBL	B (10.9) WBL	B (14.7) WBL	C (21.2) WBL
Hines Chapel Road @ Multi-Family Access #1			B (10.7) NBL			B (12.0) NBL
Hines Chapel Road @ Multi-Family Access #2			B (10.7) NBL			B (11.7) NBL
Hines Chapel Road @ Single Family Main Access			B (10.4) NBL			B (11.4) NBL

Based on the traffic analysis results, the following recommendations are made:

Minorwood Road @ McKnight Mill Road (existing unsignalized)

- There are no recommended improvements.

Nichols Avenue @ McKnight Mill Road (existing unsignalized)

- Construct a 50-foot northbound right turn lane on McKnight Mill Road.
- Construct separate left and right turn lanes on Nichols Avenue. The right turn lane should have 100 feet of storage.

Hines Chapel Road @ McKnight Mill Road (existing unsignalized)

- Construct a 100-foot right turn lane on the Mc Knight Mill Road northbound approach.

- Construct a separate right and left turn lane on Hines Chapel Road. The right turn lane should have 100 feet of storage.

Hines Chapel Road @ Multi-family Access #1 (Proposed Entrance)

- No recommended improvements.

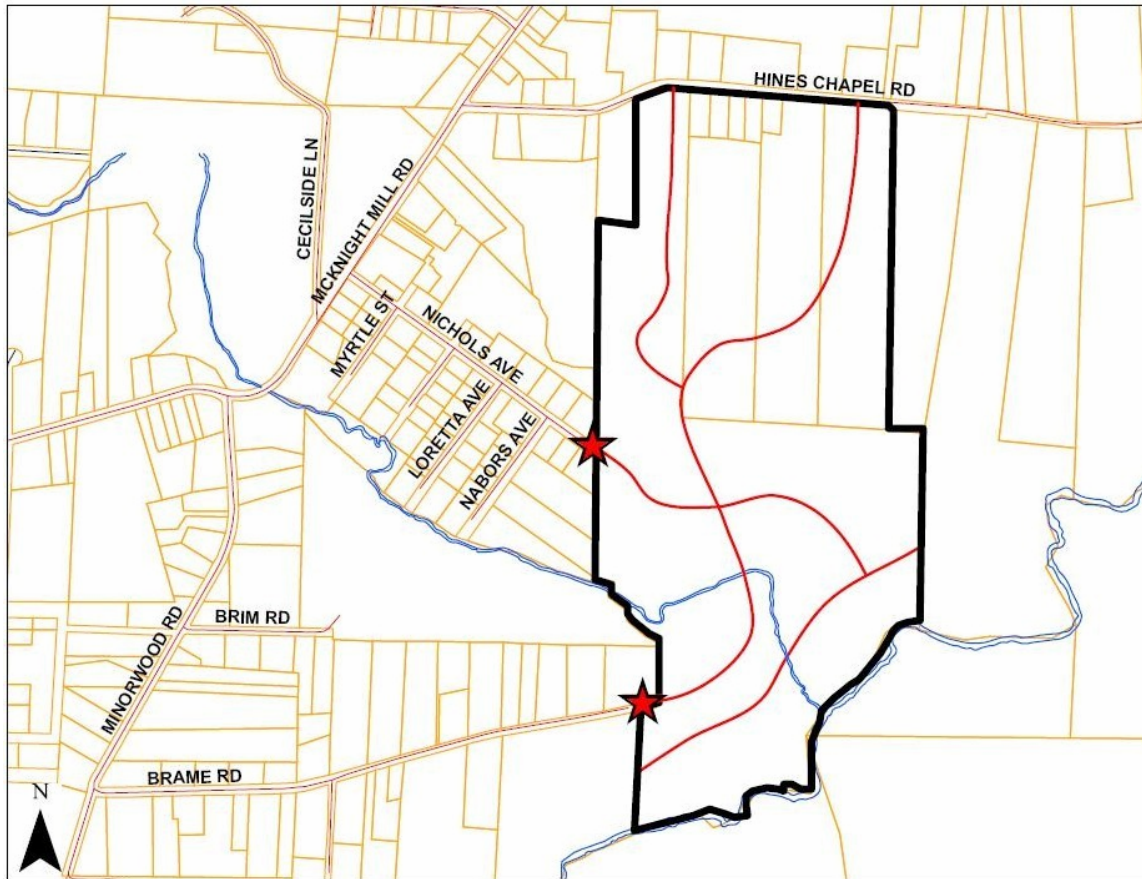
Hines Chapel Road @ Multi-family Access #2 (Proposed Entrance)

- No recommended improvements.

Hines Chapel Road @ Single Family Main Access (Proposed Entrance)

- Construct separate left and right turn lanes on the new approach.
- Construct a 50-foot right turn lane on Hines Chapel Road.

Overall, this project should have a minimal impact on the studied intersections. Analysis indicates that all the intersections will function at a LOS C or better during the build-out year (2010). In summary, although this project will add additional traffic to the area, its impact can be mitigated by the recommended improvements.



Street Connection Policy:

In accordance with Section 30-6, 13.3 (C) of the Greensboro Development Ordinance, street extensions that extend from existing neighborhood through a proposed development site into or through another existing neighborhood shall be evaluated and established based on the following criteria:

1. **Emergency Response Times:**
How much a street connection may decrease emergency response times or enhance emergency vehicle access.
(Fire Department to evaluate, Robert Cudd)

Alternate routes and connected streets are beneficial not only in response times but also helps provide better access to public and private property. This means more emergency responders are able to get closer to the scene with necessary equipment and provides the ability to maneuver vehicles.

2. Excessive Block Lengths:
Evaluate current neighborhood block lengths and determine if a street connection is needed.
(Planning Department to evaluate, Steve Galanti)

Section 30-6-13.4 (Block Length) of the Development Ordinance requires the following:

- A. The block length shall not exceed one thousand, five hundred (1,500) feet:
- B. Maximum block perimeter of six thousand (6,000) feet:
- C. Cul-de-sac Maximum Length: The maximum distance from an intersecting through street to the end of a cul-de-sac shall be eight hundred (800) feet.

This proposed development is on the periphery of the City and currently has no street network. Obviously any street network for this development will have to meet the above Ordinance requirements. The extension/connection of Brame Road or Nichols Avenue will assist in creating a street network that will meet the above Ordinance requirements. **Therefore, the connection is recommended.**

3. Traffic Congestion:
Existing and/or anticipated street patterns warrant a street connection(s) in order to reduce traffic congestion.
(Greensboro Department of Transportation to evaluate, Carrie Reeves)

The proposed street extensions/connections are proposed to be local residential street, and are not anticipated to have any impact on traffic congestion level within the area.

4. Pedestrian:
Existing street and sidewalk patterns warrant a street connection(s) and or sidewalk connection(s) to enhance pedestrian and bicyclist activities.
(Greensboro Department of Transportation to evaluate, Peggy Holland)

The proposed street connections will provide pedestrian and bicycle connection between existing and proposed residential streets.

5. Coordinated Street Plan:
A street connection fits into adopted street plans (thoroughfare plan, collector street plan, and local street plan)
(Greensboro Department of Transportation to evaluate, Carrie Reeves)

There are no adopted street plans for the Brame Road or Nichols Avenue area. The proposed Cone Boulevard extension is just south of Brame Road and borders along the southern boundary of this proposed development. The Cone Boulevard extension is identified on the City of Greensboro's adopted Thoroughfare Plan.

6. Extraneous Traffic:

Whether or not a proposed street connection(s) would encourage traffic volumes with origins and destinations outside the existing neighborhood or encourage truck traffic to pass through the neighborhood.

(Greensboro Department of Transportation to evaluate, Carrie Reeves)

The proposed street connections are not anticipated to encourage extraneous traffic to utilize this local residential street network.

7. Impacts to Natural Areas:

Whether or not a proposed street connection(s) would adversely affect streams, lakes/ponds, and whether or not there are topographical barriers or unique natural areas.

(Greensboro Department of Transportation, Water Resources Department, and Parks and Recreation Department to evaluate, Virginia Spillman, Mike Simpson)

Water Resources: There are flood ways, flood planes, and perennial streams to cross on the southern portion of this development. No encroachment is allowed in the Flood Way. However, for infrastructure crossings perpendicular to the streams the appropriate permits will be required to be obtained by the developer. For additional questions in regards to the flood hazard area please contact Stormwater in Water Resources Department.

8. Impacts to Public Facilities:

Whether or not a proposed street connection(s) would adversely affect other public facilities such as parks, bike trails, nature trails, and natural areas.

(Greensboro Department of Transportation and Parks and Recreation Department to evaluate public facilities, Mike Simpson, Peggy Holland)

Parks and Recreation: There are no impacts to public facilities such as parks, bike trails, nature trails, and natural areas.

9. Public Service Delivery:

Whether or not a proposed street connection would enhance delivery of public services.

(Greensboro Department of Transportation and Environmental Services to evaluate Carrie Reeves)

GDOT: The proposed street connections will improve the routing and delivery of goods and public services such as solid waste collection, mail/package deliveries, school bus routing, and water/sewer line connections.

Environmental Services: It continues to be the Department's preference to require the connection of all streets to allow ease of service delivery. During the event in which connectivity is not physically possible, it is the preference of the Department to allow adequately sized turnarounds. Such turnarounds should be constructed to the minimum City street design standards.

This recommendation is based on the Department's ability to provide solid waste services. For the solid waste operations, staff is instructed to avoid backing the solid waste vehicles. Five independent solid waste collection services are provided to resident/businesses on a weekly basis. Three of the five services are managed by a single operator, no safety spotter is available to guide the vehicle or assist maneuvering the vehicle safely with its inherent blind spots. The minimum length of the solid waste vehicles is 33 feet. Due to these constraints, operators are instructed to avoid backing and use available constructed turnarounds and paved areas. Supervisory staff notifies residents of obstacles placed within the turnaround locations that prevent the delivery of solid waste services.

Conclusively, solid waste service delivery is enhanced with the City's position to encourage street connectivity.

Public Involvement Procedure:

When, during the rezoning stage, the initial analysis by the City of Greensboro staff indicates a proposed street connection is warranted (based on a review of criteria 1-9) the Zoning Commission meeting will serve as the public hearing for public involvement and information gathering.

When, during the plan review stage, the initial analysis by City of Greensboro staff indicated a proposed street connection is warranted (based on a review of criteria 1-9) and prior to City of Greensboro staff making a recommendation to the Technical Review Committee, an information gathering meeting will be held with adjacent property owners to seek additional information related to criteria 1-9.

(Greensboro Department of Transportation to coordinate public involvement)

Should a proposed rezoning or an appeal of a TRC plat denial be made, this form (and attached map showing all proposed street connection locations and public involvement summary) will be provided to the Planning Board and City Council for their use and consideration in the appeals process.

Staff Recommendation:

The attached graphic in this street connectivity evaluation document is only to illustrate a conceptual connection (or one alternative) of how Brame Road and/or Nichols Avenue could be connected/extended into this proposed development. It is for illustrative purposes only. The goal of this evaluation is simply to illustrate whether or not some type of connection/extension should be made of Brame Road and/or Nichols Avenue.

The proposed connections would assist in meeting block length and perimeter, and cul-de sac ordinance requirements. There are potential impacts to streams, flood ways, and flood plains. The appropriate permits will need to be acquired by the developer. Any street network will need to take into account these issues and design a street network that will be least impactful to the flood hazard zones. The City of Greensboro will be more able to provide better/efficient services and the connection will provide for other modes of travel such as bikers and walkers. Therefore, City Staff recommends some type of connections/extensions of Brame Road and/or Nichols Avenue.

Date: September 1, 2006

Name: Carrie S. Reeves, PE

Turn Around Evaluation: In the event a extension of Brame Road and/or Nichols Avenue not approved or required of the developer.

Street: Brame Road and Nichols Avenue Extension
Limits: There is no existing network at this time
Length: Will vary depending on proposed roadway alignment

1. How important is a permanent turn around at the end of Brame Road or Nichols Avenue in order for your Department to provide services in a safe and efficient manner? (Please Circle)
 - a. **Critical**
 - b. Very Important
 - c. Somewhat Important
 - d. Not Important at all
2. Does your Department request that a permanent turn around be installed at the end of Brame Road or Nichols Avenue? (Please Circle)
 - a. **Yes** (If yes please list reasons why your department requests a turn around, please include any departmental standards and policies)
 - b. No

Environmental Services: If no through street is developed a permanent structure will be required. Solid waste does not have an alternative to backing at least 75 feet or more. Most services are provided with a single operated vehicle. Blind spots are associated with these vehicles.

Fire Department: Fire code requires any street longer than 150' to have a permanent turn around. The Greensboro Fire Department requires a minimum Cul-De-Sac diameter of 65', or a T/L – shaped turn around w/ the minimum branch length of 50'.

3. If your Department requests a permanent turn around, what type of turn-a-round do you request? (Please circle desired type of turn around)
 - a. **Cul-De-Sac (COG Std. 503)**
 - b. **Branch "L" Permanent (COG Std. 502)**
 - c. **"T"-Type Permanent (COG Std. 502)**
 - d. Temporary (COG Std. 502)
 - e. Other

Environmental Services: A cul-de-sac is the preference for the operations of Environmental Services' vehicles. However, a "t" could be managed if adequate space and visibility is provided.

Fire Department: Fire has no preference other than one of the above highlighted permanent turn arounds be installed at the end of streets.

4. Are you aware of any constraints that would prohibit the construction of a turnaround at this location?
 - a. No
 - b. Yes (Please list constraints below)